

## **ABSTRACT**

Improved methods and structures for testing of SAS components, in situ, in a SAS domain. A first SAS component is adapted to generate stimuli such as error conditions to elicit a response to the error condition from a second SAS component coupled to the first in the intended SAS domain configuration. In one aspect, a SAS device controller generates stimuli applied to a SAS expander coupled thereto and verifies proper response from the SAS expander. In another aspect, a SAS expander generates stimuli applied to a SAS device controller coupled thereto and verifies proper response from the SAS device controller. Stimuli may be generated by custom circuits or firmware/software within the first component. Vendor specific SAS SMP transactions may be used to cause the first component to enter the special verification mode.